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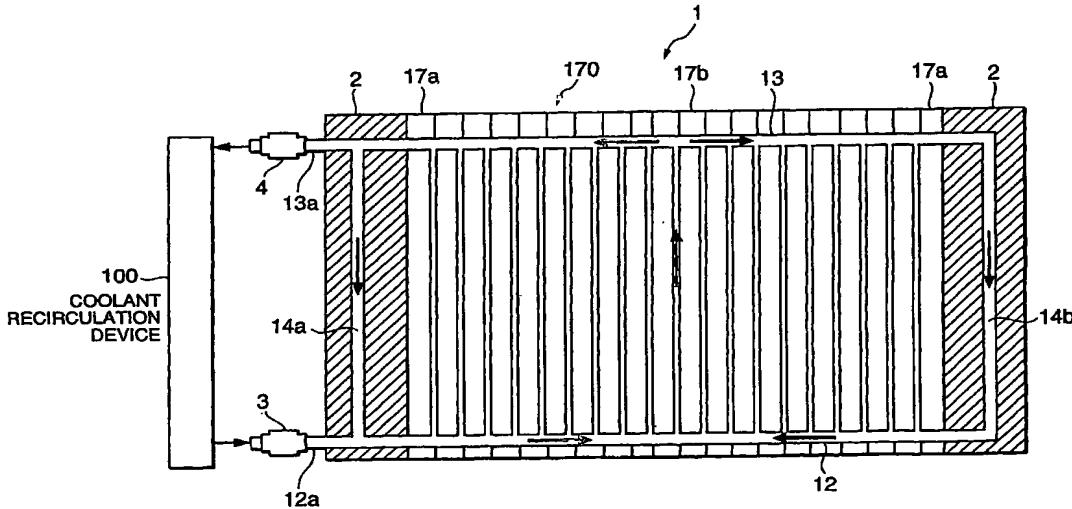
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(54) Title: FUEL CELL SYSTEM



(57) Abstract: Coolant passages (11a, 11b) are provided in unit cells (17a, 17b) which form a laminate (170) of the unit cells (17a, 17b). A coolant supply manifold (12) which distributes coolant from a coolant recirculation device (100) to the coolant passages (11a, 11b), and a coolant discharge manifold (13) which recovers coolant from the coolant passage (11a, 11b) to the coolant recirculation device (100), pass through the laminate (170). The coolant supply manifold (12) and coolant discharge manifold (13) are connected by two bypass passages (14a, 14b). At low temperature, heat transfer from the high temperature parts to the low temperature parts is promoted by shutting off circulation of coolant between the coolant recirculation device (100) and the laminate (170) by a valve (3, 4), and recirculating coolant inside the fuel cell stack (1) via the bypass passages (14a, 14b).

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